

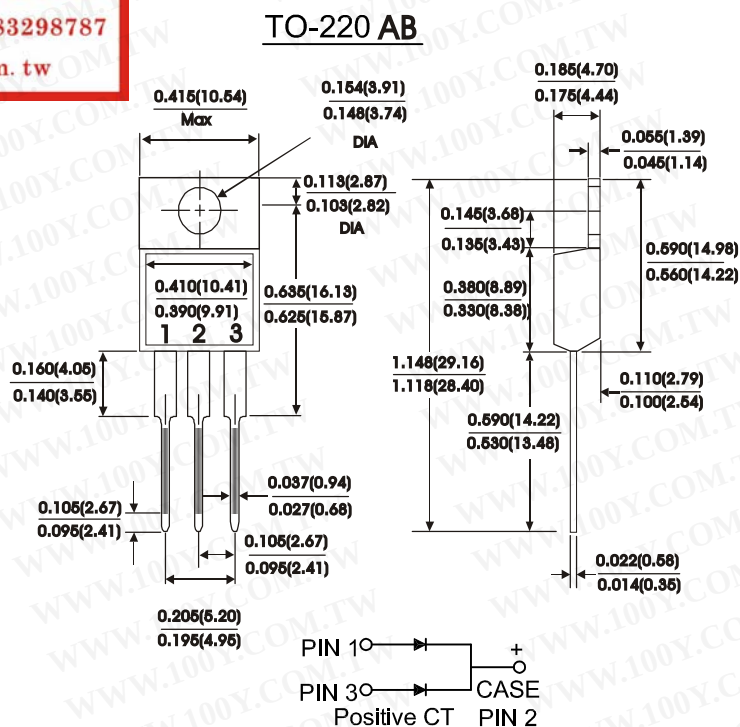
勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

## FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive centertap
- Metal silicon junction Majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed: 250°C/10 seconds, 0.25" (6.35mm) from case

## MECHANICAL DATA

Case : JEDEC TO-220AB molded plastic  
 Terminals : Leads solderable per MIL-STD-750 Method 2026  
 Polarity : As marked  
 Mounting Position : Any  
 Mounting Torque 5 in - lbs. max  
 Weight : 0.08 ounce, 2.24 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temperature unless otherwise specified.

Single phase half wave, 60 Hz resistive or inductive load.

For capacitive load, derate current by 20%.

| Characteristic                                                                                                                           | Symbol      | SR2090CT     | SR20100CT | Units              |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|-----------|--------------------|
| Maximum recurrent peak reverse voltage                                                                                                   | $V_{RRM}$   | 90           | 100       | Volts              |
| Maximum RMS voltage                                                                                                                      | $V_{RMS}$   | 63           | 70        | Volts              |
| Maximum DC blocking voltage                                                                                                              | $V_{DC}$    | 90           | 100       | Volts              |
| Maximum average forward rectified current at $T_C=125^\circ\text{C}$                                                                     | $I_O$       | 20           |           | Amps               |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)                                | $I_{FSM}$   | 150          |           | Amps               |
| Maximum instantaneous forward voltage<br>(Per leg)(NOTE 2)<br>$I_F=10\text{ A}$<br>$I_F=20\text{ A}$                                     | $V_F$       | 0.80<br>0.95 |           | Volts              |
| Maximum instantaneous reverse current at rated DC blocking voltage(Per leg)(NOTE 2)<br>$T_C=25^\circ\text{C}$<br>$T_C=125^\circ\text{C}$ | $I_R$       | 0.5<br>50    |           | mA                 |
| Typical thermal resistance(Per leg)(NOTE 1)                                                                                              | $R_{th-JC}$ | 2.0          |           | $^\circ\text{C/W}$ |
| Operating temperature range                                                                                                              | $T_J$       | -65to +150   |           | $^\circ\text{C}$   |
| Storage temperature range                                                                                                                | $T_{Stg}$   | -65to +175   |           | $^\circ\text{C}$   |

## NOTES:

(1) Thermal resistance from junction to case

(2) Pulse test : 300 us pulse width, 1% duty cycle

(3) Marking :  $\overline{\text{SR2090CT}}$  = SR2090 (Without Marking "CT")  
 Symbol Marking

# RATINGS AND CHARACTERISTIC CURVES SR2090CT THRU SR20100CT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

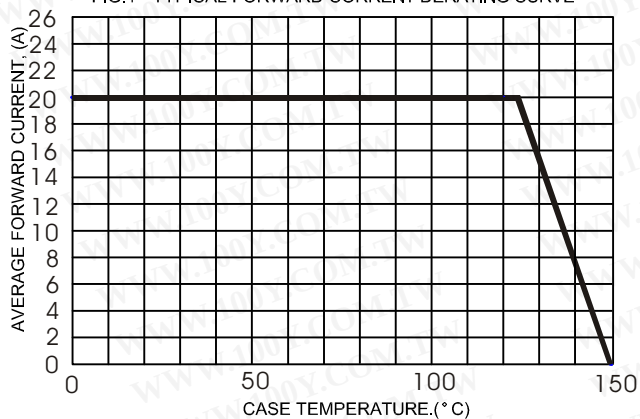


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

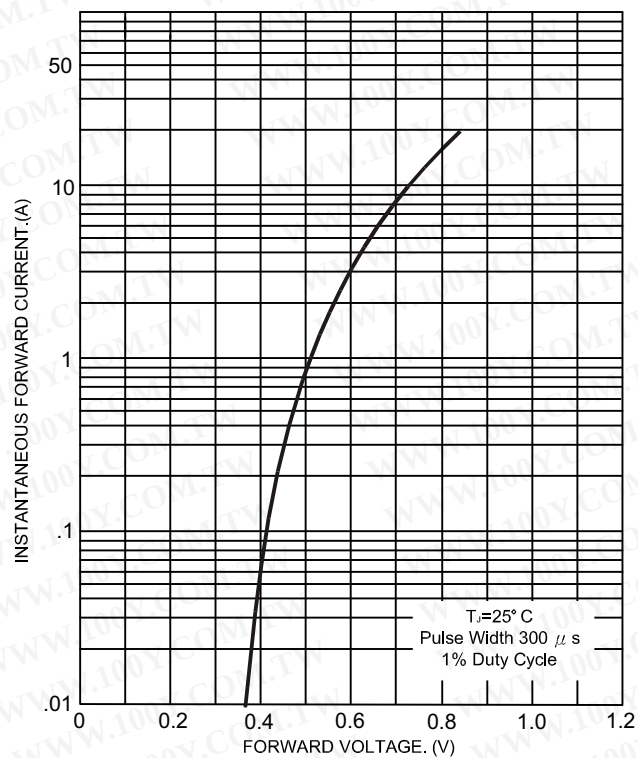


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

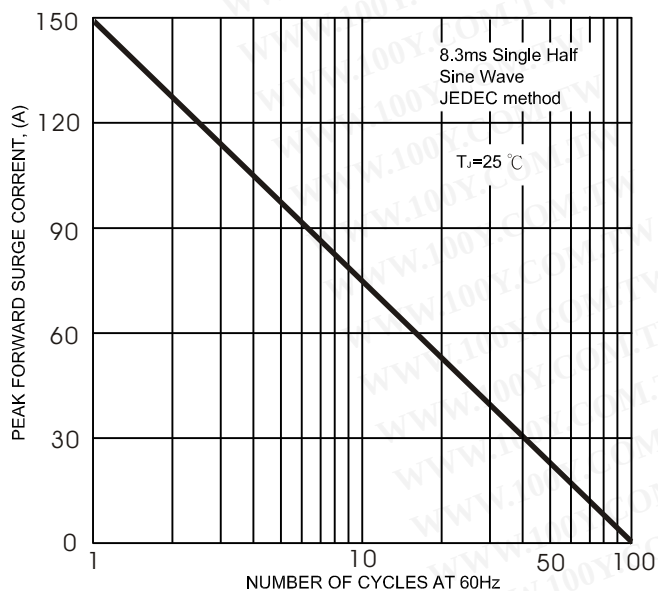
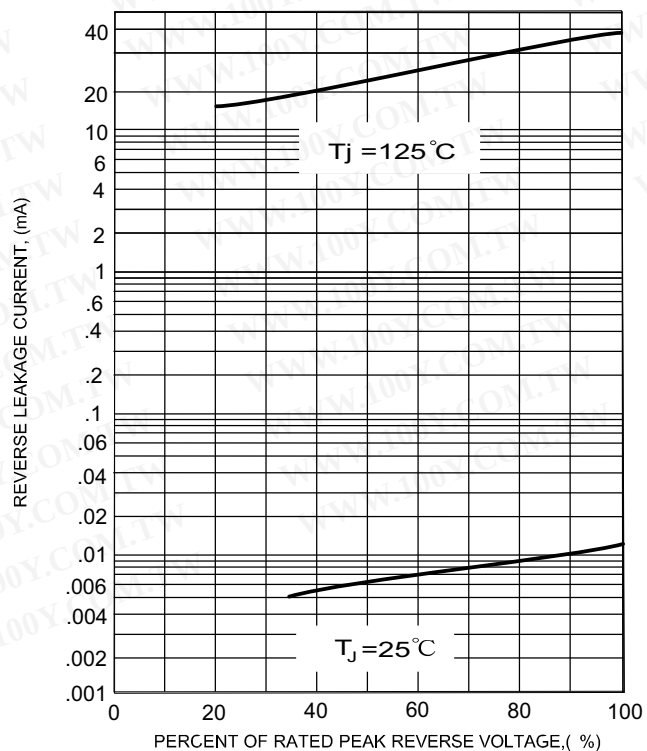


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)